

"I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

- John Snow, 1855

October 2015 Topics

- Ebola Preparedness in North Dakota Faridah Saifi
- Increase in Pertussis Cases in North Dakota Amy Schwartz
- High Number of Syphilis Cases Continue in North Dakota for 2015 Sarah Weninger
- Influenza and Gastrointestinal Illness Outbreak Reporting Jill Baber
- Salmonella Thompson Investigation Update Laura Cronquist



Ebola Preparedness in North Dakota

It is important for the North Dakota Department of Health (NDDoH) to ensure the state's preparedness for Ebola prevention. The NDDoH, Division of Disease Control received federal funding to assess and promote infection control competency, identify gaps, and implement prevention measures. The Division of Disease Control is working directly with healthcare facilities in the state by conducting field visits, sharing the assessment tools and recommendations on general infection control practices with a focus on Ebola and other emerging and highly infectious diseases of public health significance.

The NDDoH received on-site technical assistance from the Centers for Disease Control and Prevention (CDC) by jointly conducting two facility site visits in October. One of the main goals on this assessment program is to identify any gaps that exist within the healthcare facility programs and seek alternative ways to improve performance. Continued training and preparation is needed to ensure that the healthcare systems is prepared to meet the needs of returning travelers who may have been exposed to the Ebola virus.

Ebola virus disease is a highly contagious and often fatal illness in humans. It is transmitted from close contact from person to person. The 2014 Ebola epidemic was the largest in history, affecting multiple countries in the world, especially West Africa. The NDDoH is continuing to work to prepare the state's healthcare facilities to be able to quickly identify, isolate, report, and safely care for potential cases of Ebola.



Increase in Pertussis Cases in North Dakota

Since mid-September, 15 new cases of pertussis have been reported in North Dakota. Nine of these new cases reside in Morton County and are age 17 and younger. 34 total cases of pertussis have been reported so far this year in North Dakota.

Pertussis (also known as whooping cough) is a contagious disease that lasts for many weeks or months and causes severe coughing. Pertussis is often characterized by a "whooping" sound or coughing that leads to vomiting. The disease can be life threatening for infants and is usually spread by adults to infants. Generally, the illness is less severe in those who are vaccinated and may present as a prolonged cough. Pertussis should be considered for any patient with an unexplained, prolonged cough illness (longer than 14 days) characterized by one or more of the following symptoms:

- Paroxysms
- Whoop
- Post-tussive gagging/vomiting
- Apnea

People presenting with the above symptoms should be considered as presumptive pertussis cases and should be treated and advised to stay home until after five days of antibiotics or until pertussis has been ruled out. All suspect and confirmed cases of pertussis should be reported to the NDDoH immediately.

Two vaccines are available that protect against pertussis. Diphtheria, tetanus, and acellular pertussis vaccine (DTaP) should be administered routinely to infants at 2, 4, 6 and 15 to 18 months of age. A booster dose of DTaP should be given at 4 to 6 years of age. DTaP vaccine should not be given to children seven years of age and older; however, Tdap vaccine can be used to catch-up under-immunized children seven years and older. Tdap vaccine should be routinely administered to adolescents at 11 to 12 years of age. Adults who have never received a dose of Tdap should also receive a one-time dose. Pregnant women are recommended to receive a dose of Tdap during each pregnancy.



High Number of Syphilis Cases Continue in North Dakota for 2015

The number of syphilis cases reported in 2015 is on trend to be fewer than the number reported in 2014 (34 cases thus far in 2015 v. 51 in 2014), but still higher than the case counts in previous years when syphilis was a sporadically reported condition (average of 0-5 cases per year). Although some of the cases reported in 2015 are related to an outbreak that started in 2013, the majority of cases reported in 2015 are not outbreak related.

In 2015, there has been a higher percentage of cases being reported among men who have sex with men, with 60% of male cases reporting this as a risk factor. Of cases with risk information available, 50 percent of syphilis cases indicated that they have had anonymous sex partners and many of those cases said they used the internet to find their sex partners. In addition, cases often reported having sex while high or drunk and also using illegal drugs. The NDDoH encourages all healthcare providers to have the conversation with their patients about some of these high-risk sexual behaviors and the risks associated. Also, providers are encouraged to continue to screen all MSM at least annually for syphilis, as well pregnant women, due to the risk for congenital syphilis. For questions, please contact Sarah Weninger, Viral Hepatitis/STD/HIV Prevention Coordinator at sweninger@nd.gov or call 701.328.2366.



Influenza and Gastrointestinal Illness Outbreak Reporting

Both norovirus, the most common cause of gastrointestinal illness outbreaks, and influenza circulate widely during winter months. Please help the NDDoH track these outbreaks by reporting them. The NDDoH requests reports of outbreaks in group settings, including:

- Long term and Basic care facilities
- K-12 school settings

The NDDoH tracks reported outbreaks of influenza-like illness (ILI) and gastrointestinal illnesses in institutions such as those listed above in an effort to understand the impact of these diseases on our communities. For residents in health care settings, the NDDoH may also be able to provide specimen collection supplies and testing at the state lab for these outbreaks. Please see the guidelines below for more information on when reporting should occur and how to report online. Outbreaks may also be reported by calling the Division of Disease Control at 701-328-2378.

Institution	Influenza-Like Illness Outbreak	Gastrointestinal Illness Outbreak
Long Term and Basic Care Settings	Defined as: Two or more cases of ILI in residents and/or staff in close proximity to each other, which occur within 48 to 72 hours of each other. • ILI – Fever of 100°F and with cough and/or sore throat. OR One resident with a positive laboratory test for influenza.	Defined as: Two or more cases of vomiting and/or diarrheal illness in residents and/or staff in close proximity to each other, which occur within 48 to 72 hours of each other.
	Reporting Link: www.ndflu.com/Reporting/FluOutbreak.htm	Reporting Link: www.ndhealth.gov/disease/GI Click on "GI Outbreak Reporting Form for Institutions" under the Frequently Requested column on the right side of the page.
School Settings	Defined as: Student absenteeism of 10% or greater due to respiratory illness.	Defined as: Student absenteeism on 10% or greater due to illness with vomiting and/or diarrhea.
	Reporting Link: www.ndflu.com/Reporting/SchoolOutbreakReport/	Reporting Link: www.ndhealth.gov/Disease/GI Click on "GI Outbreak Reporting Form for Institutions" under the frequently Requested column on the right side of the page.

For more information on influenza, visit <u>www.ndflu.com</u>. For more information on norovirus and other gastrointestinal diseases, visit <u>www.ndhealth.gov/disease/GI</u>, or call the Department at 701-328-2378 (toll-free 866-637-9769).



Salmonella Thompson Investigation Update

The NDDoH continues to investigate a cluster of *Salmonella* Thompson infections. As of November 1, 2015, the cluster consisted of 29 cases. All cases were either from the Minot area or had reported recent travel to Minot. Ages ranged from under one year to over 60 years. Epidemiologists from the NDDoH used the National Hypothesis Generating Questionnaire (NHGQ) to interview cases, which enabled them to collect data on over 200 food and other exposures the cases may have had. The investigation has prompted environmental inspections at several restaurants in the Minot area as a precaution; however, no single food ingredient or restaurant has been identified as the source of the outbreak thus far.

In October, Master of Public Health (MPH) students from the University of North Dakota and North Dakota State University were recruited to assist the NDDoH in the collection of control data. The students volunteered their time over the course of one week to participate in random digit dialing, and sampling both landline and cell phone numbers from the Minot area. Around the same time, the NDDoH also worked with the Student Health Center at Minot State University (MSU) to distribute a modified online control survey modeled from the NHGQ to faculty and students at MSU. Sufficient control data was collected, and NDDoH staff are currently working on data entry and cleaning. Data analysis is expected to begin very soon.



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